1D quiescent flow with evaporating droplets

MATLAB scripts for 1D injection of droplets into still hot air with uniform temperature. Droplets are injected with a constant velocity and temperature.

1 Case Files

These should be run in the following order:

gfla1D	Main simulation script
gfla1D_animation	Animation of droplet data in 1D
gfla1D_animation_xr	Animation of droplet data in (x, r) space
gfla1D_plot_xr	Droplet trajectory plot
gfla1D_kernel_regression	Kernel regression for reconstruction of probability density field
gfla1D_kernel_regression_plot	Plot of probability density field obtained using kernel regression
gfla1D_x_profiles_plot	Probability density profiles at x cross sections
gfla1D_r_profiles_plot	Probability density profiles at r cross sections
gfla1D_statistics	Postprocessing for averaged field variables
gfla1D_statistics_plot	Plotting of averaged field variables

2 Miscellaneous Files

clean   Bash script for removing data and image files from directory

plot_opts Common formatting options for figures